CLAIMS:

1.   A method comprising:

receiving one or more images of a biological growth medium;

determining whether a background color value associated with the biological growth medium is within a range; and

flagging the biological growth medium for additional review if the background color value is outside the range.

2.   The method of claim 1, wherein the biological growth medium is a growth plate and flagging the biological growth medium for additional review comprises flagging the biological growth medium for review by a technician.

3.   The method of claim 1, wherein the background color value comprises one or more numbers defining a shade of the biological growth medium and the range is a shade range.

4.   A method comprising:

receiving one or more images of a biological growth medium;

identifying a first count of biological agents on the biological growth medium; and

reducing the first count to generate a second count when one or more biological agents identified in the first count are determined to be in close proximity to one or more other biological agents identified in the first count.

5.   The method of claim 4, wherein the biological agents comprise bacterial colonies.

6.   The method of claim 5, wherein reducing the first count to generate a second count comprises attributing only one count to two or more bacterial colonies within a defined distance of one another.

7.   The method of claim 5, wherein reducing the first count to generate a second count comprises attributing only one count to two or more bacterial colonies when a set of identification marks associated with the two or more bacterial colonies overlap.

8.   The method of claim 5, the method further comprising identifying one or more spreader colonies, wherein reducing the first count to generate a second count comprises excluding bacterial colonies within a defined distance of one of the spreader colonies from the second count.

9.   The method of claim 5, the method further comprising identifying one or more spreader colonies, wherein reducing the first count to generate a second count comprises excluding bacterial colonies from the second count that have identification marks that overlap that of a given one of the spreader colonies.

10.   The method of claim 4, further comprising determining whether the first count is below a threshold and reducing the first count to generate the second count only when the first count is below the threshold.

11.   A method comprising:
    receiving one or more images of a biological growth medium;
    identifying a first number of biological agents associated with an interior portion of the biological growth medium;
    identifying a second number of biological agents associated with a perimeter portion of the biological growth medium; and
    excluding from the second number one or more biological agents within a defined distance from an edge of a growth area of the growth medium when the first number is less than a threshold.

12.   The method of claim 11, further comprising excluding from the second number the one or more biological agents within the defined distance from the edge of the growth area of the growth medium when the first number is less than a threshold only when the one or more biological agents within the defined distance from the edge define areas smaller than a threshold area.

13. The method of claim 11, further comprising:

identifying the first number as first color biological agents associated with the interior portion of the biological growth medium;

identifying a third number of second color biological agents associated with the interior portion of the biological growth medium;

identifying the second number as first color biological agents associated with a perimeter portion of the biological growth medium;

identifying a fourth number of second color biological agents associated with the perimeter portion of the biological growth medium;

excluding from the second number of first color biological agents one or more first color biological agents within the defined distance from the edge of the growth area of the growth medium when the first number of the first color biological agents is less than the threshold and the one or more first color biological agents within the defined distance define areas smaller than a threshold area; and

excluding from the fourth number of second color biological agents one or more second color biological agents within the defined distance from the edge of the growth area of the growth medium when the third number of the second color biological agents is less than the threshold and the one or more second color biological agents within the defined distance define areas smaller than the threshold area.

14. The method of claim 13, wherein the biological agents comprise bacterial colonies and wherein the first color comprises red and the second color comprises blue.

15. The method of claim 11, wherein the interior portion comprises approximately 75 percent of the growth area of the growth medium and the perimeter portion comprises approximately 25 percent of the growth area of the growth medium.

16. A method comprising:

receiving one or more images of a biological growth medium;

identifying a number of first color biological agents associated with an interior portion of the biological growth medium;

identifying a number of second color biological agents associated with the interior portion of the biological growth medium;

identifying a number of first color biological agents associated with a perimeter portion of the biological growth medium;

identifying a number of second color biological agents associated with the perimeter portion of the biological growth medium;

changing the a number of second color biological agents associated with the perimeter portion to be included in the number of first color biological agents associated with the perimeter portion when the number of first color biological agents associated with the interior portion is greater than a first threshold and the number of second color biological agents associated with the interior portion is less than a second threshold.

17.   The method of claim 16, wherein the biological agents comprise bacterial colonies and wherein the first color comprises red and the second color comprises blue.

18.   The method of claim 16, wherein the interior portion comprises approximately 75 percent of a growth area of the growth medium and the perimeter portion comprise approximately 25 percent of the growth area of the growth medium.

19.   A method comprising:

receiving one or more images of a biological growth medium;

identifying a first number of biological agents associated with an interior portion of the biological growth medium;

identifying a second number biological agents associated with a perimeter portion of the biological growth medium; and

flagging the biological growth medium for additional review if the second number is greater than a factor multiplied by the first number.

20.   The method of claim 19, wherein the factor is approximately 1.5.

21.   The method of claim 19, wherein the biological growth medium is a Petri plate, the biological agents comprise bacterial colonies and flagging the biological growth

medium for additional review comprises flagging the biological growth medium for review by a technician.

22.   The method of claim 19, wherein the interior portion comprises approximately 75 percent of a growth area of the growth medium and the perimeter portion comprise approximately 25 percent of the growth area of the growth medium.

23.   A computer readable medium comprising computer readable instructions that when executed in a processor:

receive one or more images of a biological growth medium;

determine whether a background color value associated with the biological growth medium is within a range; and

flag the biological growth medium for additional review if the background color value is outside the range.

24.   The computer readable medium of claim 23, wherein the biological growth medium is a growth plate and the instructions flag the biological growth medium for review by a technician if the background color value is outside the range.

25.   The computer readable medium of claim 23, wherein the background color value comprises one or more numbers defining a shade of the biological growth medium and the range is a shade range.

26.   A computer readable medium comprising computer readable instructions that when executed in a processor:

receive one or more images of a biological growth medium;

identify a first count of biological agents on the biological growth medium; and

reduce the first count to generate a second count when one or more biological agents identified in the first count are determined to be in close proximity to one or more other biological agents identified in the first count.

27.   The computer readable medium of claim 26, wherein the biological agents comprise bacterial colonies.

28.   The computer readable medium of claim 27, wherein reducing the first count to generate a second count comprises attributing only one count to two or more bacterial colonies within a defined distance of one another.

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29.   The computer readable medium of claim 27, wherein reducing the first count to generate a second count comprises attributing only one count to two or more bacterial colonies when a set of identification marks associated with the two or more bacterial colonies overlap.

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30.   The computer readable medium of claim 27, wherein the instructions when executed identify one or more spreader colonies, wherein reducing the first count to generate a second count comprises excluding bacterial colonies within a defined distance of one of the spreader colonies from the second count.

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31.   The computer readable medium of claim 27, wherein the instructions when executed identify one or more spreader colonies, wherein reducing the first count to generate a second count comprises excluding bacterial colonies from the second count that have identification marks that overlap that of a given one of the spreader colonies.

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32.   The computer readable medium of claim 26, wherein the instructions when executed determine whether the first count is below a threshold and reduce the first count to generate the second count only when the first count is below the threshold.

25   33.   A computer readable medium comprising computer readable instructions that when executed in a processor:
        receive one or more images of a biological growth medium;
        identify a first number of biological agents associated with an interior portion of the biological growth medium;
30   identify a second number of biological agents associated with a perimeter portion of the biological growth medium; and

exclude from the second number one or more biological agents within a defined distance from an edge of a growth area of the growth medium when the first number is less than a threshold.

5   34.   The computer readable medium of claim 33, wherein the instructions when executed exclude from the second number the one or more biological agents within the defined distance from the edge of the growth area of the growth medium when the first number is less than a threshold only when the one or more biological agents within the defined distance from the edge define areas smaller than a threshold area.

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35.   The computer readable medium of claim 33, wherein the instructions when executed:

identify the first number as first color biological agents associated with the interior portion of the biological growth medium;

15   identify a third number of second color biological agents associated with the interior portion of the biological growth medium;

identify the second number as first color biological agents associated with a perimeter portion of the biological growth medium;

identify a fourth number of second color biological agents associated with the

20   perimeter portion of the biological growth medium;

exclude from the second number of first color biological agents one or more first color biological agents within the defined distance from the edge of the growth area of the growth medium when the first number of the first color biological agents is less than the threshold and the one or more first color biological agents within the

25   defined distance define areas smaller than a threshold area; and

exclude from the fourth number of second color biological agents one or more second color biological agents within the defined distance from the edge of the growth area of the growth medium when the third number of the second color biological agents is less than the threshold and the one or more second color biological agents within the

30   defined distance define areas smaller than the threshold area.

36. The computer readable medium of claim 35, wherein the biological agents comprise bacterial colonies and wherein the first color comprises red and the second color comprises blue.

37. The computer readable medium of claim 35, wherein the interior portion comprises approximately 75 percent of the growth area of the growth medium and the perimeter portion comprises approximately 25 percent of the growth area of the growth medium.

38. A computer readable medium comprising computer readable instructions that when executed in a processor:

receive one or more images of a biological growth medium;

identify a number of first color biological agents associated with an interior portion of the biological growth medium;

identify a number of second color biological agents associated with the interior portion of the biological growth medium;

identify a number of first color biological agents associated with a perimeter portion of the biological growth medium;

identify a number of second color biological agents associated with the perimeter portion of the biological growth medium;

change the a number of second color biological agents associated with the perimeter portion to be included in the number of first color biological agents associated with the perimeter portion when the number of first color biological agents associated with the interior portion is greater than a first threshold and the number of second color biological agents associated with the interior portion is less than a second threshold.

39. The computer readable medium of claim 38, wherein the biological agents comprise bacterial colonies and wherein the first color comprises red and the second color comprises blue.

40. The computer readable medium of claim 38, wherein the interior portion comprises approximately 75 percent of a growth area of the growth medium and the

perimeter portion comprise approximately 25 percent of the growth area of the growth medium.

41.   A computer readable medium comprising computer readable instructions that when executed in a processor:

receive one or more images of a biological growth medium;

identify a first number of biological agents associated with an interior portion of the biological growth medium;

identify a second number biological agents associated with a perimeter portion of the biological growth medium; and

flag the biological growth medium for additional review if the second number is greater than a factor multiplied by the first number.

42.   The computer readable medium of claim 41, wherein the factor is approximately 1.5.

43.   The computer readable medium of claim 41, wherein the biological growth medium is a Petri plate, the biological agents comprise bacterial colonies and the instructions when executed flag the biological growth medium for review by a technician if first number is greater than a factor multiplied by the second number.

44.   The computer readable medium of claim 41, wherein the interior portion comprises approximately 75 percent of a growth area of the growth medium and the perimeter portion comprise approximately 25 percent of the growth area of the growth medium.

45.   A system comprising:

an imaging device to generate one or more images of a biological growth medium; and

a processor to receive the images, determine whether a background color value associated with the biological growth medium is within a range, and flag the biological growth medium for additional review if the background color value is outside the range.

46.   The system of claim 45, wherein the background color value comprises one or more numbers defining a shade of the biological growth medium and the range is a shade range.

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47.   A system comprising:

an imaging device to generate one or more images of a biological growth medium; and

a processor to receive the images, identify a first count of biological agents on

10   the biological growth medium, and reduce the first count to generate a second count when one or more biological agents identified in the first count are determined to be in close proximity to one or more other biological agents identified in the first count.

48.   The system of claim 47, wherein the biological agents comprise bacterial

15   colonies.

49.   The system of claim 48, wherein the processor reduces the first count to generate a second count by attributing only one count to two or more bacterial colonies within a defined distance of one another.

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50.   The system of claim 48, wherein the processor reduces the first count to generate a second count by attributing only one count to two or more bacterial colonies when a set of identification marks associated with the two or more bacterial colonies overlap.

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51.   The system of claim 48, wherein the processor identifies one or more spreader colonies, wherein the processor reduces the first count to generate a second count by excluding bacterial colonies within a defined distance of one of the spreader colonies from the second count.

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52.   The system of claim 48, wherein the processor identifies one or more spreader colonies, wherein the processor reduces the first count to generate a second count by

excluding bacterial colonies from the second count that have identification marks that overlap that of a given one of the spreader colonies.

53.   The system of claim 47, wherein the processor determines whether the first count is below a threshold and reduces the first count to generate the second count only when the first count is below the threshold.

54.   A system comprising:

an imaging device to generate one or more images of a biological growth medium; and

a processor to receive the images, identify a first number of biological agents associated with an interior portion of the biological growth medium, identify a second number of biological agents associated with a perimeter portion of the biological growth medium, and exclude from the second number one or more biological agents within a defined distance from an edge of a growth area of the growth medium when the first number is less than a threshold.

55.   The system of claim 54, wherein the processor, excludes from the second number the one or more biological agents within the defined distance from the edge of the growth area of the growth medium when the first number is less than a threshold only when the one or more biological agents within the defined distance from the edge define areas smaller than a threshold area.

56.   The system of claim 54, wherein the processor identifies the first number as first color biological agents associated with the interior portion of the biological growth medium, identifies a third number of second color biological agents associated with the interior portion of the biological growth medium, identifies the second number as first color biological agents associated with a perimeter portion of the biological growth medium, identifies a fourth number of second color biological agents associated with the perimeter portion of the biological growth medium, excludes from the second number of first color biological agents one or more first color biological agents within the defined distance from the edge of the growth area of the growth medium when the first number of the first color biological agents is less than the threshold and the one or

more first color biological agents within the defined distance define areas smaller than a threshold area, and excludes from the fourth number of second color biological agents one or more second color biological agents within the defined distance from the edge of the growth area of the growth medium when the third number of the second color

5   biological agents is less than the threshold and the one or more second color biological agents within the defined distance define areas smaller than the threshold area.

57.   The system of claim 54, wherein the interior portion comprises approximately 75 percent of the growth area of the growth medium and the perimeter portion

10   comprises approximately 25 percent of the growth area of the growth medium.

58.   A system comprising:

an imaging device to generate one or more images of a biological growth medium; and

15   a processor to receive the images, identify a number of first color biological agents associated with an interior portion of the biological growth medium, identify a number of second color biological agents associated with the interior portion of the biological growth medium, identify a number of first color biological agents associated with a perimeter portion of the biological growth medium, identify a number of second

20   color biological agents associated with the perimeter portion of the biological growth medium, and change the a number of second color biological agents associated with the perimeter portion to be included in the number of first color biological agents associated with the perimeter portion when the number of first color biological agents associated with the interior portion is greater than a first threshold and the number of

25   second color biological agents associated with the interior portion is less than a second threshold.

59.   The system of claim 58, wherein the biological agents comprise bacterial colonies and wherein the first color comprises red and the second color comprises blue

30   and, wherein the interior portion comprises approximately 75 percent of a growth area of the growth medium and the perimeter portion comprise approximately 25 percent of the growth area of the growth medium.

60.   A system comprising:

an imaging device to generate one or more images of a biological growth medium; and

a processor to receive the images, identify a first number of biological agents associated with an interior portion of the biological growth medium, identify a second number biological agents associated with a perimeter portion of the biological growth medium, and flag the biological growth medium for additional review if the second number is greater than a factor multiplied by the first number.

61.   The system of claim 60, wherein the factor is approximately 1.5, the interior portion comprises approximately 75 percent of a growth area of the growth medium and the perimeter portion comprise approximately 25 percent of the growth area of the growth medium.